

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
(PW FORM PAT-1449)  
Patent and Trademark Office

Atty.  
Dkt. No.

M#

Client Ref.

304500

P-1503.001-US

**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

Applicant: Steven HANSEN

Appln. No.: ~~TO BE ASSIGNED~~ 10/716,439

Filing Date: November 20, 2003

Date: November 20, 2003

Page

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of

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Examiner:

Group Art Unit:

**U.S. PATENT DOCUMENTS**

| Examiner's<br>Initials* | Document<br>Number | Date<br>MM/YYYY | Name<br>(Family Name of First Inventor) | Class | Sub<br>Class | Filing<br>Date<br>(if appropriate) |
|-------------------------|--------------------|-----------------|---|-------|--------------|------------------------------------|
| AM                      | AR 5,305,054       | 04/1994         | SUZUKI et al.                           |       |              |                                    |
| AM                      | BR 6,049,660       | 04/2000         | AHN et al.                              |       |              |                                    |
| AM                      | CR 6,452,662       | 09/2002         | MULKENS et al.                          |       |              |                                    |
| AM                      | DR 6,466,304       | 10/2002         | SMITH                                   |       |              |                                    |
|                         | ER                 |                 |   |       |              |                                    |
|                         | FR                 |                 |   |       |              |                                    |
|                         | GR                 |                 |   |       |              |                                    |
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|                         | MR                 |                 |   |       |              |                                    |
|                         | NR                 |                 |   |       |              |                                    |

**FOREIGN PATENT DOCUMENTS**

| ORIGINAL DOCUMENT |    |                 |              |         |               |  | Abstract |    | Readily Available |    |
|-------------------|----|-----------------|--------------|---------|---------------|--|----------|----|-------------------|----|
|                   |    | Document Number | Date MM/YYYY | Country | Inventor Name |  | Enclosed | No | Enclose           | No |
|                   | OR |                 |              |         |               |  |          |    |                   |    |
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|                   | WR |                 |              |         |               |  |          |    |                   |    |
|                   | XR |                 |              |         |               |  |          |    |                   |    |

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

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| CCR |  |  |  |
| DDR |  |  |  |

Examiner Alan Mathews

Date Considered: 8-5-2005

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant: Steven HANSEN

Appln. No.: 10/716,439

Filing Date: November 20, 2003

Date: February 20, 2004

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Examiner:

Group Art Unit:

## U.S. PATENT DOCUMENTS

| Examiner's<br>Initials* |    | Document<br>Number | Date<br>MM/YYYY | Name<br>(Family Name of First Inventor) | Class | Sub<br>Class | Filing<br>Date<br>(if appropriate) |
|-------------------------|----|--------------------|-----------------|---|-------|--------------|------------------------------------|
| AM                      | AR | 5,523,193          | 06/1996         | NELSON                                  |       |              |                                    |
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| AM                      | CR | 2002/0035461 A1    | 03/2002         | CHANG et al.                            |       |              |                                    |
| AM                      | DR | 2002/0045106 A1    | 04/2002         | BASELMANS et al.                        |       |              |                                    |
| AM                      | ER | 2002/0062206 A1    | 05/2002         | LIEBCHEN                                |       |              |                                    |
| AM                      | FR | 2002/0152452 A1    | 10/2002         | SOCHA                                   |       |              |                                    |
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|                         | IR |                    |                 |   |       |              |                                    |
|                         | JR |                    |                 |   |       |              |                                    |
|                         | KR |                    |                 |   |       |              |                                    |
|                         | LR |                    |                 |   |       |              |                                    |
|                         | MR |                    |                 |   |       |              |                                    |
|                         | NR |                    |                 |   |       |              |                                    |

## FOREIGN PATENT DOCUMENTS

|  |    | Document<br>Number | Date<br>MM/YYYY | Country | Inventor Name | English<br>Abstract |    | Translation<br>Readily<br>Available |    |
|--|----|--------------------|-----------------|---------|---------------|---------------------|----|-------------------------------------|----|
|  |    |                    |                 |         |               | Enclosed            | No | Enclose                             | No |
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|  | XR |                    |                 |         |               |                     |    |                                     |    |

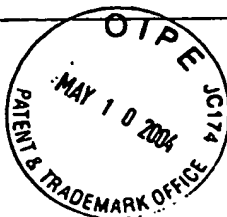
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

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Examiner Alan Mathews

Date Considered: 8-6-2005

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|                   |        |               |
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| Atty.<br>Dkt. No. | M#     | Client Ref.   |
|                   | 304500 | P-1503.001-US |

**INFORMATION DISCLOSURE STATEMENT  
 BY APPLICANT**

|                                |                              |
|--------------------------------|------------------------------|
| Applicant: HANSEN              |                              |
| Appln. No.: 10/716,439         |                              |
| Filing Date: November 20, 2003 |                              |
| Examiner: NOT<br>ASSIGNED      | Group Art Unit: 2825<br>2851 |

Date: May 10, 2004      Page 1 of 1

**U.S. PATENT DOCUMENTS**

| Examiner's<br>Initials* | Document<br>Number | Date<br>MM/YYYY | Name<br>(Family Name of First Inventor) | Class | Sub<br>Class | Filing<br>Date<br>(if appropriate) |
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| AM                      | AR 5,680,588       | 10/1997         | Gortych et al.                          |       |              |                                    |
| AM                      | BR 2003/0082463 A1 | 05/2003         | Laidig et al.                           |       |              |                                    |

**FOREIGN PATENT DOCUMENTS**

|  |    | Document<br>Number | Date<br>MM/YYYY | Country | Inventor Name |  | Abstract |    | Readily<br>Available |    |
|--|----|--------------------|-----------------|---------|---------------|--|----------|----|----------------------|----|
|  |    |                    |                 |         |               |  | Enclosed | No | Enclose              | No |
|  | CR |                    |                 |         |               |  |          |    |                      |    |

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|    | ER | Chen et al., "Practical Method for Full-Chip Optical Proximity Correction," <i>SPIE</i> , Vol. 3051, 1997, pp. 790-803.  |  |  |  |
|    | FR | Chen et al., "Optical Proximity Correction for Intermediate-Pitch Features Using Sub-Resolution Scattering Bars," <i>Journal of Vacuum Science &amp; Technology B</i> , Vol. 15, No. 6, Nov/Dec 1997, pp. 2426-2433. |  |  |  |
|    | GR | Flagello et al., "Lithographic Lens Testing: Analysis of Measured Aerial Images, Interferometric Data and Photoresist Measurements," <i>SPIE Microlithography Seminar</i> , 1996.                                    |  |  |  |
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|    | IR | Gau et al., "Strategy to Manipulate the Optical Proximity Effect by Post-Exposure Bake Processing," <i>SPIE</i> , Vol. 3334, 1998, pp. 885-891.  |  |  |  |
|    | JR | Gau et al., "The Customized Illumination Aperture Filter for Low k1 Photolithography Process," <i>SPIE</i> , Vol. 4000, March 2000, pp. 271-282.   |  |  |  |
|    | KR | Hsia et al., "Customized Off-Axis Illumination Aperture Filtering for Sub-0.18 $\mu$ m KrF Lithography," <i>SPIE</i> , Vol. 3679, March 1999, pp. 427-434.   |  |  |  |
|    | LR | Liu et al., "The Application of Alternating Phase-Shifting Masks to 140 nm Gate Patterning: Line Width Control Improvements and Design Optimization," <i>SPIE</i> , Vol. 3236, 1998, pp. 328-337.                    |  |  |  |
|    | MR | Smith et al., "Illumination Pupil Filtering Using Modified Quadrupole Apertures," <i>SPIE</i> , Vol. 3334, 1998, pp. 384-394.  |  |  |  |
|    | NR | Suzuki et al., "Multilevel Imaging System Realizing k <sub>1</sub> =0.3 Lithography," <i>SPIE</i> , Vol. 3679, March 1999, pp. 396-407.  |  |  |  |
| ✓  | OR | Wong et al., "Level-Specific Lithography Optimization for 1-Gb DRAM," <i>IEEE Transactions on Semiconductor Manufacturing</i> , Vol. 13, No. 1, February 2000, pp. 76-87.  |  |  |  |

Examiner Alan Mathews      Date Considered: 8-5-2005

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HANSEN - 10/716,439  
Docket No. 081468-0304500



APPENDIX

| Examiner's Initials | First Inventor | Application No. | Filing Date       | Enclosed   |
|---------------------|----------------|-----------------|-------------------|--|
| AM                  | Liebchen       | 10/705,234      | November 12, 2003 | <input checked="" type="checkbox"/> Specification<br><input checked="" type="checkbox"/> Drawings<br><input checked="" type="checkbox"/> Other: Claims |
|                     |                |                 |                   |  |

The Examiner's initials indicates he/she has considered the cited application relative to the subject application.

**DO NOT PRINT** the above information on the patent which results from the subject application.

*Alan A. Mathews*

*Date Considered*  
*8-5-2005*

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Patent and Trademark Office

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Dkt. No.

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304500

P-1503.010-US

Applicant: HANSEN

Appln. No.: 10/716,439

Filing Date: November 20, 2003

Examiner: TBA

Group Art Unit: 2825

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date: August 27, 2004

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## U.S. PATENT DOCUMENTS

| Examiner's<br>Initials* | Document<br>Number | Date<br>MM/YYYY | Name<br>(Family Name of First Inventor) | Class | Sub<br>Class | Filing<br>Date<br>(if appropriate) |
|-------------------------|--------------------|-----------------|---|-------|--------------|------------------------------------|
| AM                      | AR 2003/0073013 A1 | 04/2003         | Hsu et al.                              |       |              |                                    |
|                         | BR                 |                 |   |       |              |                                    |
|                         | CR                 |                 |   |       |              |                                    |
|                         | DR                 |                 |   |       |              |                                    |
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## OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

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Examiner Alan Mathews

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